Thermo Scientific™ General Purpose Centrifuge Series

To select the right centrifuge for your lab, choose an option at the top of the screen, or click below to see what's new

Let's get started

Thermo Fisher
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Continuous innovation

New industrial design with improved ergonomics for ease of use and touch screen capabilities to help save you time

View Graphical Interface	State-of-the-art touchscreen interface
View safe operation	Safety and ergonomic enhancements
View enhancements	Enhancements to make your day in the lab easier

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Graphic User Interface
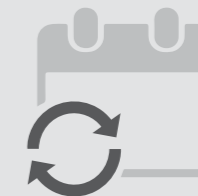
Modern, intuitive touchscreen interface

User-intuitive screen enables easy access and programming for faster results

View

New Lighthouse Mode provides run status visibility from across the lab, now with adjustable-volume alerts

View

Scheduling features and preventative maintenance queues to help reduce downtime

View

Simple touchscreen programming

Click below to discover the new touchscreen features

- Easily accessible menu bar ⟩

- Keep an eye on centrifuge health ⟩

- Time-saving pre-temp button ⟩

- Customize quick spins ⟩

- Access helpful info with one touch ⟩

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Lighthouse mode

Track progress without having to step away from your work

- Easily monitor your run progress from across the lab with enlarged time and tracker bar

- Plus, end-of-run alerts can be programmed with customized volume settings

15000rpm 2000xg
15000rpm Setpoint

F10-14x50 LEX
Spin Program 01
Step 2 of 3

24°C
24°C Setpoint

02:10:01
3:00:00 Setpoint

2 Accel 1   2   3   2 Decel

Stop

Thermo Fisher
S C I E N T I F I C
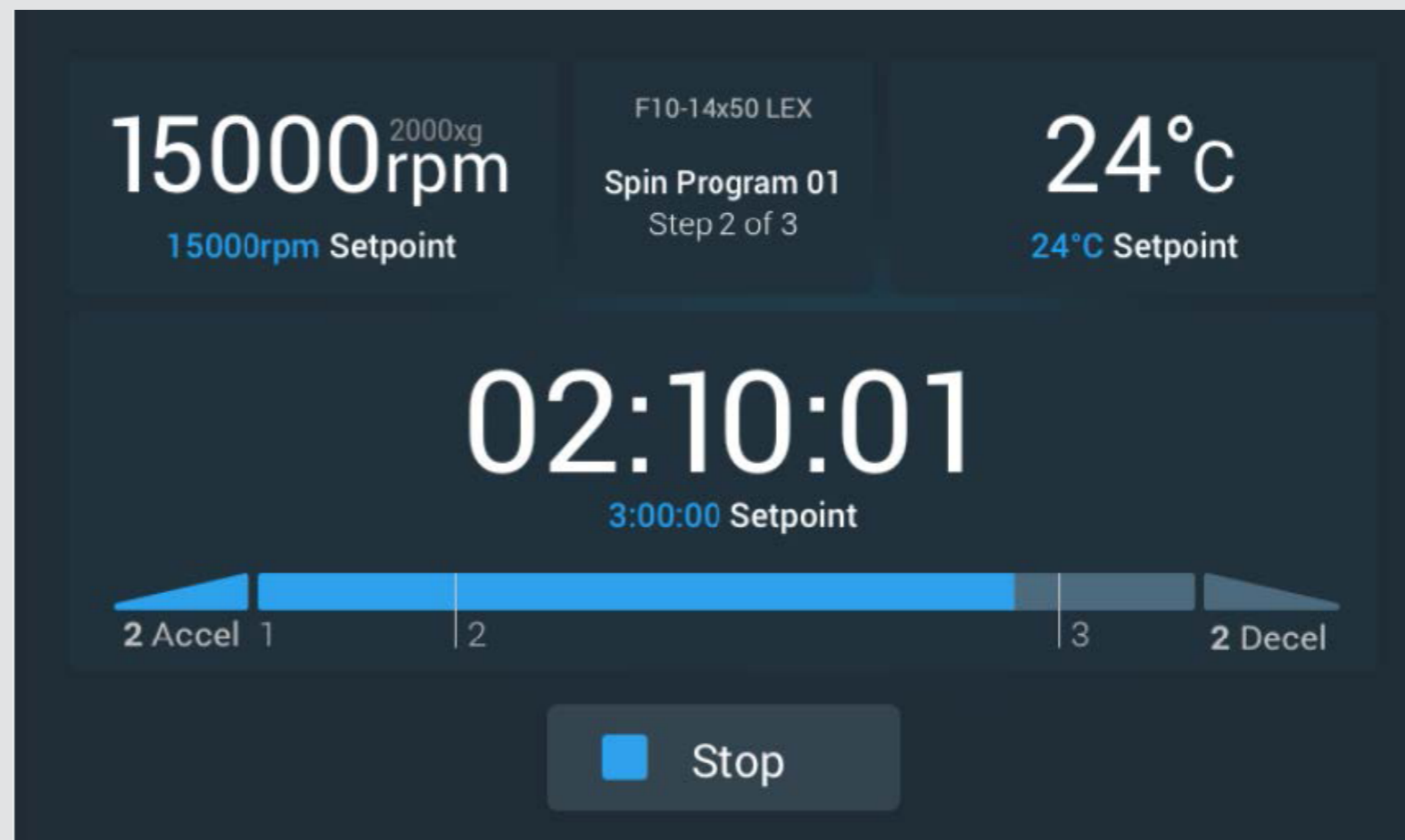
Smart controls

- Pre-programmed start-up of compressor for temperature-ready centrifuge as soon as you arrive in the lab ›

- Shut-down programming can extend compressor life and reduce energy costs ›

Acme Labs GP 2
11:22:24AM | May 12, 2019
Scheduling

Auto On   ✓ Enabled   Auto Off   ✓ Enabled

Current Settings   Current Settings
Day(s): M–F   Day(s): M, W, F
Time: 5:30AM   Time: 8:00PM
Temp: -5°C   Lid: Open

✏ Edit   ✏ Edit

01   02   03   04   05   **06**   07

Safety features

Improved reach-in during rotor installation for safer loading and unloading

Hand grip cue on the lid indicates the easiest and best one-handed closure location

View

Improved safety with reduced pinch-points designed to prevent accidental injury. Motorized gas springs with safety protection

View

01   02   03   04   05   06   **07**

Enhancements

Accessory tray holds tools or samples as you prepare for your run   `View`

Front USB port for easier plug in and data transfer   `View`

Other new benefits include:

- compliance with most-recent applicable regulatory and safety standards
- available energy-saving settings
- 23 rotor options to choose from

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Consistent performance

Thermo Scientific technologies designed for solid performance and consistent results in a wide range of applications

View performance — Broad choice of speed, capacity and application

View Auto-Lock™ — Simple, fast rotor exchange

View Fiberlite™ — Outstanding rotor ergonomics and perfomance

View ClickSeal™ — One-handed biocontainment closures

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Flexible performance with more than 20 rotor options

Achieve faster results with the ability to hold up to 196 blood tubes, 40 x 50 mL conical tubes, or 24 microplates in one run
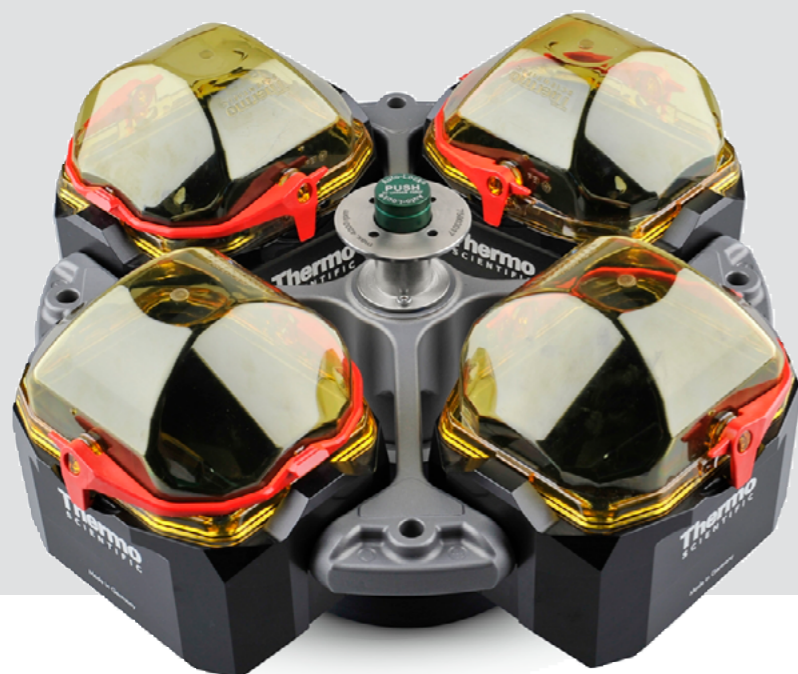
- With fixed-angle rotor speeds over 25000 x g, and swinging buckets rotor speeds over 6000 x g, even the toughest separations can be completed better and faster ⊙

- Motorized lid latch reduces closure time and is easy to operate/handle ⊙

- Slide-coat finish on swinging buckets rotors reduces the need for lubrication, for more consistent separations and less chance of grease contamination ⊙

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Auto-Lock™ Rotor Exchange

Helps save time. Faster answers.

- Secure, ergonomic push-button rotor exchange in as little as 3 seconds

- Trouble-free installation and removal with no tools required

- Full chamber access for cleaning convenience and minimizes risk of drip tray contamination

- Flexibility to quickly switch between applications and evolve with the changing needs of your laboratory

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Fiberlite™ Carbon Fiber Rotors

Outstanding ergonomics and performance

Lighter materials, advanced designs and industry experience all contribute to the development of superior rotor products with better performance, efficiency and built-in safety features

Click below to learn how Fiberlite™ Rotors let researchers focus on their work – worry-free

1 Biocontainment

2 Design

3 Performance

4 Ergonomics

5 Value

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5 Ways

Fiberlite™ Rotors let researchers focus on their work – worry-free

1 2 3 4 5

1 Biocontainment

- Fiberlite™ Rotor / lid combinations, and liquid containment annulus offer features that protect the user, the centrifuge and the samples from hazardous contamination

- Biocontainment certified by Public Health England, Porton Down, UK

Thermo Fisher SCIENTIFIC

5 Ways

Fiberlite™ Rotors let researchers focus on their work – worry-free

1 **2** 3 4 5

2 Design

Innovative molded-design to protect tubes from cracking, sample loss, and centrifuge damage.
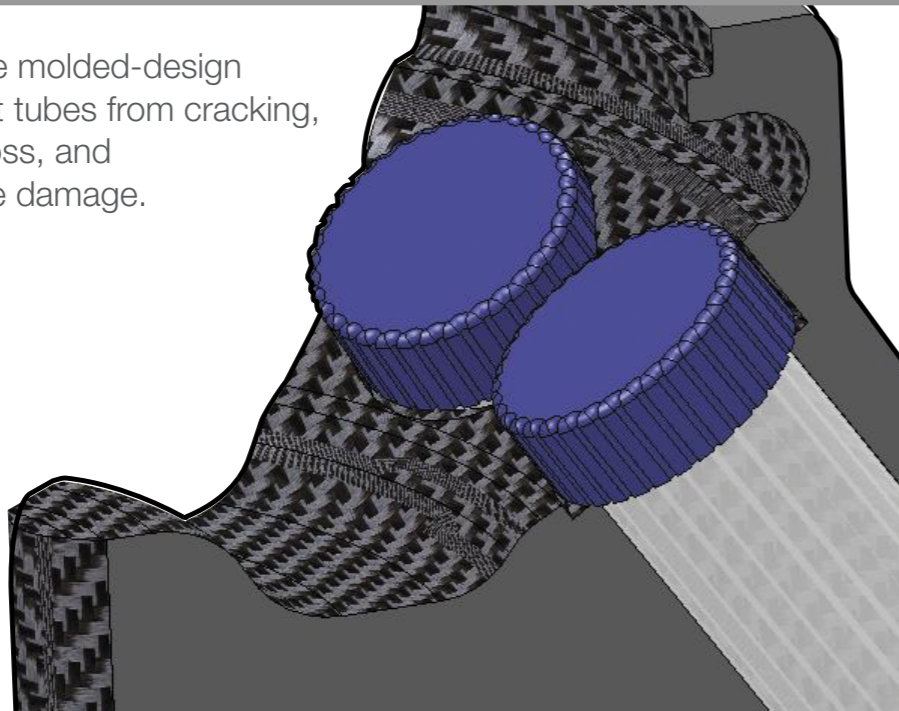
- Corrosion-resistance and fatigue-resistance maintain the rotor's structural integrity for outstanding durability

- Fiberlite™ Rotors are designed to "unwind" rather than split or break, so your centrifuge is better protected from damage in the unlikely event of a rotor failure

- Carbon fiber offers a unique ability to mold each cavity to perfectly fit tubes, bottles and other consumables, enabling faster spins for tougher separations

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5 Ways

Fiberlite™ Rotors let researchers focus on their work – worry-free

1   2   **3**   4   5

Time savings with carbon fiber rotors

Acceleration and deceleration rate comparison of 6 x 250 mL capacity floor model rotors*

Fiberlite™ Carbon Fiber Rotor	**1:35/1:15**	**Savings** (2:55 minutes)
Aluminum rotor	3:45/2:00	

Accel/decel rates

3 Performance

- Thermo Scientific™ Fiberlite™ Rotors are each balanced and tested before they leave the factory for precision performance

- Automatic rotor recognition eliminates the need for manual input**

- Fiberlite™ Rotors can reach higher speeds than metal equivalents, improving separations in tubes such as 15 or 50 mL conicals

* Based on a comparison with manufacturers' published specifications.

**After reaching speeds of 200 rpm; please see manual for details.

5 Ways

Fiberlite™ Rotors let researchers focus on their work – worry-free

1 2 3 **4** 5

Weight savings with carbon fiber rotors

Weight comparison of fully loaded 6 x 250 mL capacity floor model rotors*

43% savings
(6 kg/13 lbs)

14 kg/30 lbs

Aluminum rotor

8 kg/17 lbs

Fiberlite™ Carbon Fiber Rotor
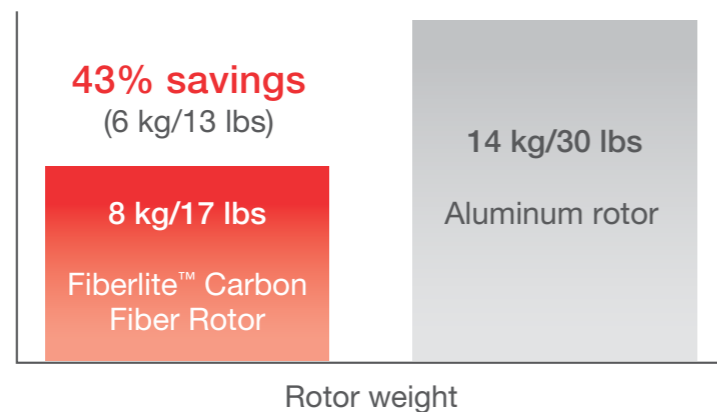
Rotor weight

4 Ergonomics

- Auto-Lock™ allows push-button rotor exchange in as little as 3 seconds with no tools or complicated procedures required

- Carbon fiber is lighter in weight allowing for easier lifting in and out of the centrifuge

- Unique integrated handle design allows for easy gripping to exchange rotors for a variety of applications

- Easy rotor exchange simplifies cleaning and disinfecting procedures

* Based on a comparison with manufacturers' published specifications.

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5 Ways | *Fiberlite™ Rotors let researchers focus on their work – worry-free*

1 2 3 4 **5**

Warranty with carbon fiber rotors

Average warranty periods for metal rotors compared with Fiberlite™ Carbon Fiber Rotors*

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Fiberlite™ Carbon Ffiber Rotor

Aluminum rotor**

Titanium rotor**

Warrantied rotor life

Operation with periodic inspections
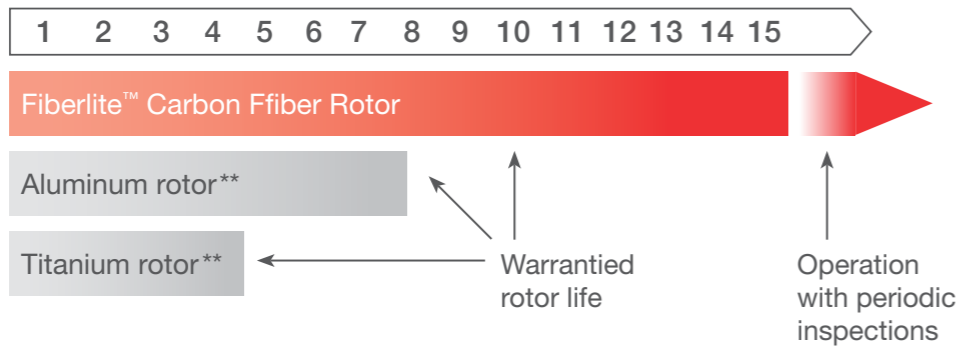
5 Value

- On-site clinics and maintenance are available to ensure proper use and care, extending the life of your rotors

- Our continuously improving rotor designs have increased the capacities available on the same size centrifuge, resulting in outstanding efficiency and throughput across the range

- Industry leading 15 year warranty

* Average warranty periods were calculated based on industry average of years an aluminum or titanium rotor may be covered under warranty per manufacturers' published specifications.

**Warranty coverage may vary by rotor. Please refer to manufacturer for specific warranty coverage for each rotor.

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ClickSeal™ Biocontainment Lids

One-handed sample protection

- Biocontainment sealing options for glove-friendly, one-handed open/close capability are ergonomically designed for both right- and left-handed operations

- Simple operation for all laboratory users, eliminating multi-turn screw caps and complicated high pressure clips

- Biocontainment certification by Public Health England, Porton Down, UK

THERMO SCIENTIFIC™ PRO AND PLUS CENTRIFUGE SERIES

Thermo Fisher
S C I E N T I F I C

Maximize capacity.
Higher quality pellets.

There is a rotor available for nearly every application to solve your swinging buckets and fixed angle needs

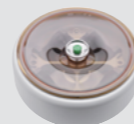## Swinging buckets

Find your consumable ⊙

View rotor details ⊙

Fixed angle

Find your consumable ⊙

View rotor details ⊙

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Swinging buckets rotors

Thermo Scientific Rotor Name	TX-1000	TX-750	BIOShield 1000A	TX-400	BIOShield 720
Maximum Capacity (mL)	4 x 1000 mL	4 x 750 mL	4 x 250 mL	4 x 400 mL	4 x 180 mL
Maximum Speed (rpm[1])	4200 rpm	4700 rpm	6000 rpm	5000 rpm	6300 rpm
Maximum RCF (x g[1])	4122 x g	4816 x g	7164 x g	4696 x g	7188 x g
Biocontainment ☀	✓ (Optional)	✓ (Optional)	✓ (Integrated)	✓ (Optional)	✓ (Integrated)
Sorvall X4 Pro/X4F Pro	✓	✓	✓		
Sorvall ST4 Plus/ST4F Plus	✓	✓	✓		
Sorvall X1 Pro				✓	✓
Sorvall ST1 Plus				✓	✓
Maximum Capacity — 1000 mL Bio-Bottle	4	–	–	–	–
750 mL Bio-Bottle	4	4	–	–	–
500 mL Nalgene™ Bottle	4	–	–	–	–
500 mL Corning™ Bottle	4	4	–	–	–
250 mL Nalgene Bottle	8	4	4	4	–
250 mL Corning Bottle	4	4	–	–	–
225 mL - 175 mL Conical Bottle	8	4	–	4	–
50 mL Conical Tube	40	28	16	16	8
50 mL Skirted Conical Tube	20	20	16	–	–
50 mL Nalgene Oak Ridge Tube	48	28	–	16	–
30 mL Sterilin™ Universal Tube	28	28	16	12	16
15 mL Conical Tube	96	56	36	36	24
10 mL Blood Collection Tube (16 x 100 mm)	148	84	64	56	48
5/7 mL Blood Collection Tube (13 x 75-100 mm)	196	108	80	76	48
4.5/6 mL Blood Collection Tube	164	108	–	64	–
1.5/2 mL Microtube	192	192	224	136	160
Microplate	24	16	–	–	–

[1]Maximum speed based on top performance models.

☀ Biocontainment certification by Public Health England, Porton Down, UK.

Labware not shown to scale.

Thermo Fisher SCIENTIFIC

Swinging buckets rotors
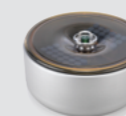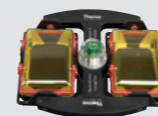
Thermo Scientific Rotor Name		TX-200	HIGHPlate 6000	Fiberlite H3-LV	M-20	H-Flex 1	H-Flex HS4
Maximum Capacity (mL)		4 x 180 mL	10 Microplates	28 Microplates	6 Microplates	16x50 ml	16x50 ml
Maximum Speed (rpm[1])		5500 rpm	6300 rpm	3600 rpm	4000 rpm	4700 rpm	6100 rpm
Maximum RCF (x g[1])		5580 x g	6168 x g	2738 x g	2272 x g	4297 x g	7197 x g
Biocontainment ✦		✓ (Optional)	✓ (Integrated)		✓ (Optional)	✓	✓
Sorvall X4 Pro/X4F Pro			✓	✓	✓		✓
Sorvall ST4 Plus/ST4F Plus					✓		
Sorvall X1 Pro		✓			✓	✓	
Sorvall ST1 Plus		✓			✓	✓	
Maximum Capacity	1000 mL Bio-Bottle	–	–	–	–	–	–
	750 mL Bio-Bottle	–	–	–	–	–	–
	500 mL Nalgene™ Bottle	–	–	–	–	–	–
	500 mL Corning™ Bottle	–	–	–	–	–	–
	250 mL Nalgene Bottle	–	–	–	–	–	–
	250 mL Corning Bottle	–	–	–	–	–	–
	225 mL - 175 mL Conical Bottle	–	–	–	–	–	–
	50 mL Conical Tube	4	–	–	–	16	16
	50 mL Skirted Conical Tube	4	–	–	–	–	–
	50 mL Nalgene Oak Ridge Tube	–	–	–	–	–	–
	30 mL Sterilin™ Universal Tube	4	–	–	–	–	–
	15 mL Conical Tube	20	–	–	–	36	36
	10 mL Blood Collection Tube (16 x 100 mm)	28	–	–	–	66	66
	5/7 mL Blood Collection Tube (13 x 75-100 mm)	32	–	–	–	84	84
	4.5/6 mL Blood Collection Tube	32	–	–	–	–	–
	1.5/2 mL Microtube	48	–	–	–	–	–
	Microplate	–	10	28	6	10	10

[1]Maximum speed based on top performance models.

✦ Biocontainment certification by Public Health England, Porton Down, UK.

Labware not shown to scale.

Thermo Fisher SCIENTIFIC

Rotors and adapters for swinging buckets rotors

TX-1000 Swinging Bucket Rotor[1], 90°, R_{max} 209 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4R/X4RF Pro	4200	4122
Sorvall X4/X4F Pro	3800	3374
Sorvall ST4R/ST4RF Plus	4200	4122
Sorvall ST4/ST4F Plus	3800	3374
Sorvall X1 Pro	n/a	n/a
Sorvall ST1 Plus	n/a	n/a

Adapters

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003017		TX-1000 Rotor Cross	4 x 1,000 mL or 24 microplate	
75003001		TX-1000 Buckets (Set of 4)		
75007309		TX-1000 ClickSeal Biocontainment Lids (Set of 4) ☀		
75007001		Replacement O-rings		
75007300		1000 mL Bio-Bottle - Polypropylene (Set of 4)		
Adapters for TX-1000 Rotor (Sets of 4)				
75007301	1	1000 mL Bio-Bottle	4 x 1,000 mL	126 x 140
75007304	2	750 mL Polypropylene Bio-Bottle and any TX-750 Round adapter	4 x 750 mL	98 x 133
75004253	3	500 mL Nalgene Bottle	4 x 500 mL	70 x 160
75007302	4	500 mL Corning Bottle	4 x 500 mL	98 x 133
75005392	5	250 mL Corning Conical Bottle or 200 mL Nunc™ Bottle or 175 mL Nalgene Conical Bottle	4 x 250 mL	62 x 145
75007305	6	250 mL Nalgene Bottle	8 x 250 mL	62 x 145
75007305	6	225 mL BD Falcon™ (requires BD #352090)	8 x 225 mL	62 x 130
75007305	6	200 mL Nunc Conical Bottle (requires Nunc #377585)	8 x 200 mL	62.5 x 139
75003674	7	50 mL Conical Tube	40 x 50 mL	30 x 120
75004255	8	50 mL Double Biocontainment Vessel for 50 mL Conical Tube (can be combined with ClickSeal lids)	20 x 50 mL	30 x 120
75004252	9	50 mL Nalgene Oak Ridge Tube	48 x 50 mL	29.5 x 120
75007306	10	15 mL Conical Tube	96 x 15 mL	17.5 x 121
75003672	11	10 mL Blood Collection Tube (16 x 100 mm) or Corex™/Kimble™ Tubes	148 x 10 mL	17 x 110
75003697	12	9/10 mL Blood Collection Tube (Sarstedt™)	100 x 9/10 mL	17 x 110
75003671	13	5/7 mL Blood Collection Tube (13 x 75-100 mm)	196 x 5/7 mL	14 x 110
75003709	14	4.5/6 mL Blood Collection Tube (Greiner™)	164 x 4.5/6 mL	14 x 110
75007303	15	Microplate Carriers	4 x 6 Standard or 4 x 2 Deep-Well	Height < 88 mm
75003829	16	Small Bag/Cell Culture Bags 4 x 2 Bags (< 350 mL)	4 x 2 Bags	

[1] Rotor, buckets and lids sold separately.

☀ Biocontainment certification by Public Health England, Porton Down, UK.

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Rotors and adapters for swinging buckets rotors

TX-750 Swinging Bucket Rotor[1], 90°, R_{max} 195 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	4700	4816
Sorvall ST4/ST4F Plus	4700	4816
Sorvall X1 Pro	n/a	n/a
Sorvall ST1 Plus	n/a	n/a

Adapters

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003180		TX-750 Rotor Cross		
75003608		TX-750 Round Buckets (Set of 4)	4 x 750 mL	
75003609		TX-750 Round ClickSeal Biocontainment Lids (Set of 4) ✿		
75003610		Replacement TX-750 Round O-rings for lids (Set of 4)		
75003699		750 mL Bio-Bottle - Polypropylene (Set of 12)		
75003795	1	Microplate Carriers and T-75 Flask (includes tray and pads) (Set of 2)	4 Standard Microplate or 1 Deep well plate per carrier	Maximum height 60 mm
75003617	1	Microplate Carriers and T-75 Flask (includes tray and pads) (Set of 4)		
Adapters for TX-750 Rotor (Sets of 4, unless stated otherwise)				
Direct		750 mL Bio-Bottle	4 x 750 mL	98 x 133
Direct		500 mL Corning Conical Bottle	4 x 500 mL	98 x 133
75003792	2	250 mL Corning Conical Bottle (unsealed buckets only)	4 x 250 mL	62.5 x 139
75003710	3	250 mL Nalgene Bottle	4 x 250 mL	62.5 x 139
75003710	3	225 mL/175 mL BD Falcon Conical Bottle (requires BD #352090) (Open buckets only)	4 x 225 mL	62.5 x 139
75003710	3	200 mL Nunc Conical Bottle (requires Nunc #377585) (Open buckets only)	4 x 200 mL	62.5 x 139
75003710	3	175 mL Nalgene Conical Bottle (requires Nalgene #DS3126-0175) (Open buckets only)	4 x 175 mL	62.5 x 139
75003713	4	100 mL Round Bottom Open-Top Tube	8 x 100 mL	45 x 123
75003638	5	50 mL Conical Tube	28 x 50 mL	30 x 120
75003824	6	50 mL Conical or Skirted Tube	20 x 50 mL	30 x 120
75003715	7	50 mL Nalgene Oak Ridge Tube	28 x 50 mL	29.5 x 120
75003716	8	30 mL Sterilin Universal Tube	28 x 30 mL	25.5 x 120
75003639	9	15 mL Conical Tube	56 x 15 mL	17 x 122
75003719	10	15 mL Blood Collection Tube (17 x 125 mm) (inner circle only)	32 x 15 mL	17 x 134
75003719	11	10 mL Blood Collection (16 x 100 mm) or 15 mL Corex/Kimble Tube	84 x 10/15 mL	17 x 117
75003718	11	14 mL Round or Conical Urine Tube	48 x 14 mL	18 x 124
75003723	12	5/7 mL or 4.5/6 mL Blood Collection Tube (13 x 75-100 mm)	108 x 5/7 mL	13 x 116
75003724	13	5 mL RIA or Round Bottom Tube (with out cap)	148 x 5 mL	13 x 111
75003732	14	5/7 mL Round Bottom Tube (without cap) with Decanting Aid	148 x 5/7 mL	13 x 111
75003733	14	1.5/2 mL Microtube	192 x 2 mL	11 x 50
75008383	15	T-75 Nunc Easy Flask (Set of 2)	4 x T-75	–
75008384	16	T-25 Nunc Easy Flask (Set of 2)	8 x T-25	–
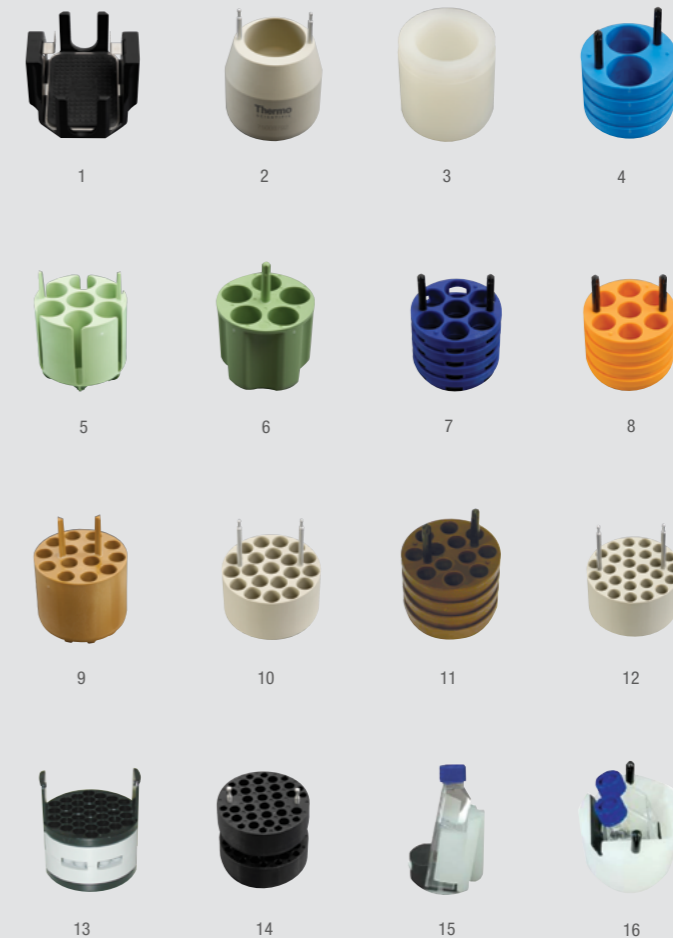
more

[1] Rotor, buckets and lids sold separately.
✿ Biocontainment certification by Public Health England, Porton Down, UK.

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S C I E N T I F I C

Rotors and adapters for swinging buckets rotors
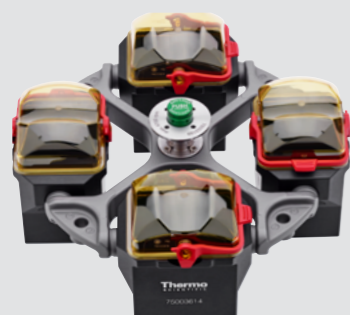
TX-750 Swinging Bucket Rotor, 90°, R_{max} 195 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4R/X4RF Pro, ST4R/ST4RF Plus, 230V	4700	4816
Sorvall X4/X4F Pro, ST4/ST4F Plus, 230V	4500	4415
Sorvall X4/X4F Pro Series, ST4/ST4F Plus Series, 120V	4300	4031
Sorvall X1 Pro/ST1 Plus	n/a	n/a

Adapters

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003180		TX-750 Rotor Cross		
75003614		TX-750 Rectangular Buckets (Set of 4)	4 x 250 mL	
75003615		TX-750 Rectangular Click Seal Biocontainment Lids (Set of 4) ✿		
75003616		Replacement TX-750 Rectangular O-rings for lids (Set of 4)		
Adapters for TX-750 Rotor (Sets of 4)				
75003737	1	250 mL Flat Bottom Bottle	4 x 250 mL	63 x 130
75003738	2	150 mL Round Bottom Open-Top Tube	4 x 150 mL	56 x 124
75003742	3	100 mL Round Bottom Open-Top Tube	4 x 100 mL	46 x 124
75003685	4	50 mL Conical Tube	20 x 50 mL	30 x 121
75003749	5	50 mL Round Bottom Tube	12 x 50 mL	35 x 121
75003750	6	45 mL Flat/Round Tube	16 x 45 mL	30 x 121
75003755	7	30 mL Sterilin Universal Tube	16 x 30 mL	26 x 121
75003756	8	25 mL DIN Round Bottom Tube	24 x 25 mL	26 x 121
75003684	9	15 mL Conical Tube	48 x 15 mL	17 x 120
75003758	10	14 mL Flanged Round Bottom Tube	36 x 14 mL	18 x 121
75003759	11	14 mL Round or Conical Urine Tube	36 x 15 mL	17 x 124
75003767	12	10 mL Blood Collection (16 x 100 mm) or 15 mL DIN Tube	64 x 10/15 mL	17 x 118
75003768	13	5/7 mL or 4.5/6 mL Blood Collection Tube	80 x 5/7 mL	14 x 118
75003769	14	5/7 mL Round Bottom Tube (13 x 75-100 mm)	112 x 5/7 mL	13 x 119
75003770	15	1.5/2 mL Microtube	224 x 2 mL	11 x 50

more

✿ Biocontainment certification by Public Health England, Porton Down, UK.

Thermo Fisher SCIENTIFIC

Rotors and adapters for swinging buckets rotors
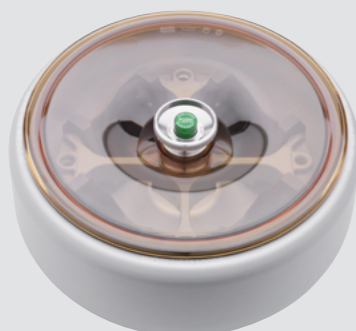
BIOShield 1000A Swinging Bucket Rotor, 90°, R$_{max}$ 178 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	6000	7164
Sorvall ST4/ST4F Plus	5300	5590
Sorvall X1 Pro	n/a	n/a
Sorvall ST1 Plus	n/a	n/a

Adapters

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003182		BIOShield 1000A ✤	4 x 250 mL	
Adapters for BIOShield 1000A Rotor (Sets of 4)				
75003737	1	250 mL Flat Bottom Bottle	4 x 250 mL	63 x 130
75003738	2	150 mL Round Bottom Open-Top Tube	4 x 150 mL	56 x 124
75003742	3	100 mL Round Bottom Open-Top Tube	4 x 100 mL	46 x 124
75003749	4	50 mL Round Bottom Tube	12 x 50 mL	35 x 121
75003750	5	45 mL Flat/Round Tube	16 x 45 mL	30 x 121
75003755	6	30 mL Sterilin Universal Tube	16 x 30 mL	30 x 121
75003756	7	25 mL DIN Round Bottom Tube	24 x 25 mL	26 x 121
75003758	8	14 mL Flanged Round Bottom Tube	36 x 14 mL	18 x 121
75003759	9	14 mL Round or Conical Urine Tube	36 x 15 mL	17 x 124
75003767	10	10 mL Blood Collection (16 x 100 mm) or 15 mL DIN Tube	64 x 10/15 mL	17 x 118
75003768	11	5/7 mL or 4.5/6 mL Blood Collection Tube	80 x 5/7 mL	14 x 118
75003769	12	5/7 mL Round Bottom Tube (13 x 75-100 mm)	112 x 5/7 mL	13 x 119
75003770	13	1.5/2 mL Microtube	224 x 2 mL	11 x 50
75003643	14	50 mL Conical Tube	16 x 50 mL	30 x 121
75003642	15	15 mL Conical Tube	36 x 15 mL	17 x 120

1   2   3   4

5   6   7   8

more

9   10   11   12

13   14   15

✤ Biocontainment certification by Public Health England, Porton Down, UK.

Thermo Fisher
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Rotors and adapters for swinging buckets rotors

TX-400 Swinging Bucket Rotor[1], 90°, R_{max} 168 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	n/a	n/a
Sorvall ST4/ST4F Plus	n/a	n/a
Sorvall X1 Pro	5000	4696
Sorvall ST1 Plus	5000	4696

Adapters

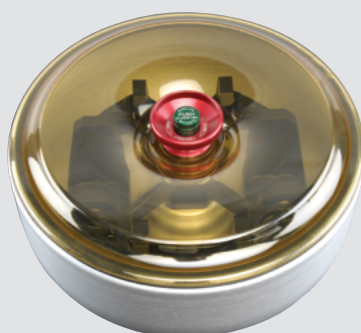| Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003181		TX-400 Rotor Cross		
75003655		TX-400 Round Buckets (Set of 4)	4 x 400 mL	
75003656		TX-400 Round ClickSeal Biocontainment Lids (Set of 4) ✷		
75003657		Replacement TX-400 O-rings for lids (Set of 4)		
75007585		400 mL Bio-Bottle - Polypropylene (Set of 12)		
Adapters for TX-400 Rotor (Sets of 4)				
Direct		400 mL Bio-Bottle	4 x 400 mL	80 x 125
75003788	1	250 mL Thermo Scientific Nalgene™ Bottle	4 x 250 mL	62 x 135
75003788	1	200 mL Thermo Scientific Nunc Conical Bottle (requires Nunc #377585)	4 x 200 mL	62 x 125
75003788	1	225 mL/175 mL BD Falcon Conical Bottle (requires BD #352090)	4 x 175 mL	62 x 125
75003708	2	100 mL Round Bottom Open-Top Tube	4 x 100 mL	45 x 117
75003707	3	50 mL DIN Round Bottom Tube	12 x 50 mL	34.5 x 105
75003799	4	50 mL Nalgene™ Oak Ridge Tube	16 x 50 mL	29.5 x 114
75003683	5	50 mL Conical Tube	16 x 50 mL	30 x 116
75003703	6	30/25 mL DIN Round/Flat Bottom Tube	20 x 30 mL	25.5 x 108
75003706	7	30 mL Sterilin Universal Tube	12 x 30 mL	25 x 110
75003682	8	15 mL Conical Tube	36 x 15 mL	17 x 121
75003794	9	15 mL Blood Collection Tube (17 x 125 mm)	16 x 15 mL	17 x 131
75003704	10	15 mL Round Bottom Tube (Sarstedt)	40 x 15 mL	17 x 105
75003798	11	14 mL Round or Conical UrineTube	28 x 14 mL	17 x 112
75003681	12	10 mL Blood Collection (16 x 100 mm)	56 x 10/15 mL	16 x 113
75003680	13	5/7 mL Blood Collection Tube (13 x 75-100 mm)	76 x 5/7 mL	13 x 110
75003825	14	4.5/6 mL Blood Collection Tube (Greiner)	64 x 4.5/6 mL	13 x 110
75003793	15	3 mL RIA or Round Bottom Tube (without cap)	76 x 3/5 mL	11 x 110
75003700	16	1.5/2 mL Microtube	136 x 2 mL	11 x 45

1, 2, 3, 4

5, 6, 7, 8

9, 10, 11, 12

13, 14, 15, 16

more

[1]Rotor, buckets and lids sold separately.
✷Biocontainment certification by Public Health England, Porton Down, UK.

Thermo Fisher SCIENTIFIC

Rotors and adapters for swinging buckets rotors

BIOShield 720 Swinging Bucket Rotor, 90°, R_{max} 162 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	n/a	n/a
Sorvall ST4/ST4F Plus	n/a	n/a
Sorvall X1 Pro	6300	7188
Sorvall ST1 Plus	5300	5088
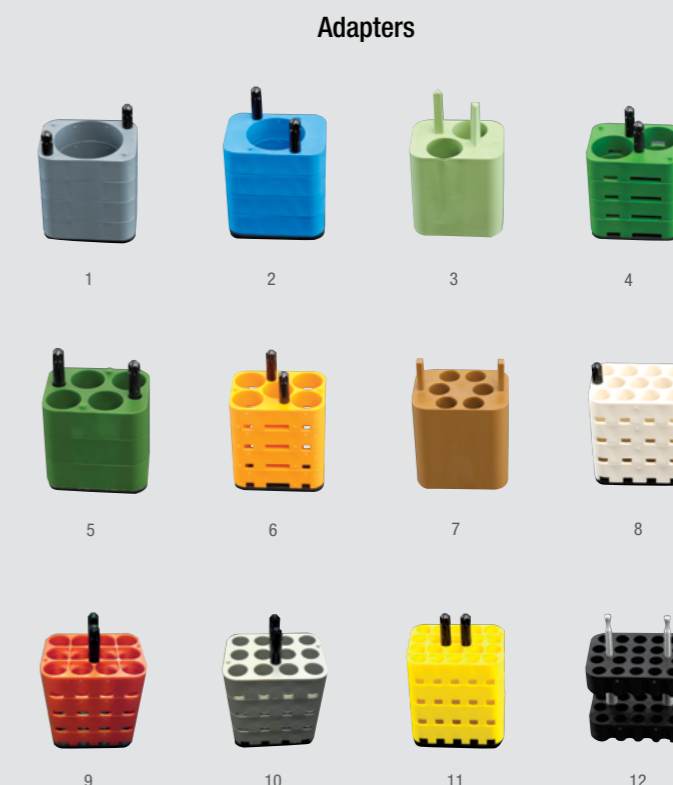
Adapters

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9   10   11   12

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Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003183		BIOShield 720 ⚜	4 x 180 mL	n/a
75003693		180 mL Bio-Bottle - Polypropylene (Set of 12)		
BIOShield 720A Adapters (Sets of 4)				
75003813	1	150 mL Round Bottom Open-Top Tube	4 x 150 mL	50 x 122
75003814	2	100 mL Round Bottom Open-Top Tube	4 x 100 mL	44 x 120
75003677	3	50 mL Conical Tube	8 x 50 mL	30 x 116
75003816	4	50 mL DIN Round Bottom Tube	8 x 50 mL	34 x 109
75003818	5	30 mL Sterilin Universal Tube	16 x 30 mL	26 x 105
75003817	6	25 mL DIN Round Bottom Tube	20 x 25 mL	25 x 107
75003678	7	15 mL Conical Tube	24 x 15 mL	17 x 120
75003820	8	15 mL Sarstedt Tube	44 x 15 mL	17 x 103
75003701	9	10 mL Blood Collection Tube (16 x 100 mm)	48 x 10 mL	17 x 105
75003821	10	5/7 mL Blood Collection Tube (13 x 75-100 mm)	48 x 5/7 mL	13 x 106
75003822	11	5/7 mL Round Bottom Open-Top Tube	80 x 5/7 mL	13 x 104
75003823	12	1.5/2 mL Conical Microtube	160 x 2 mL	11 x 45

⚜ Biocontainment certification by Public Health England, Porton Down, UK.

Thermo Fisher
S C I E N T I F I C

Rotors and adapters for swinging buckets rotors

TX-200 Swinging Bucket Rotor[1], 90°, R_{max} 165 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	n/a	n/a
Sorvall ST4/ST4F Plus	n/a	n/a
Sorvall X1R Pro 230V and 120V	5500	5580
Sorvall X1 Pro 120V	5250	5084
Sorvall ST1R Plus 230V and 120V	5500	5580
Sorvall ST1 Plus 120V	5250	5084

Adapters

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003658		TX-200 Rotor Cross		
75003659		TX-200 Round Buckets (Set of 4)	4 x 180 mL	
75003660		TX-200 Round ClickSeal Biocontainment Lids (Set of 4) ✣		
75003687		Replacement TX-200 O-rings for lids (Set of 4)		
75003800		180 mL Bio-Bottle - Polypropylene (Set of 12)		
Adapters for TX-200 Rotor (Sets of 4)				
Direct		180 mL Bio-Bottle	4 x 180 mL	56.5 x 123
75003801	1	100 mL Round Bottom Open-Top Tube	4 x 100 mL	48 x 122
75003802	2	50 mL DIN Round Bottom Tube	4 x 50 mL	35 x 126
75003815	3	50 mL Round Bottom Tube	4 x 50 mL	32 x 126
75003803	4	50 mL Conical or Skirted Tube	4 x 50 mL	30 x 126
75003804	5	30 mL Sterilin™ Universal Tube	4 x 30 mL	26 x 118
75003805	6	25 mL DIN Round/Flat Bottom Tube	8 x 25 mL	25 x 118
75003806	7	20 mL Round Bottom Tube	12 x 25 mL	22 x 125
75003771	8	15 mL Conical Tube	20 x 20 mL	17 x 121
75003809	9	15 mL Blood Collection Tube	16 x 15 mL	17 x 121
75003807	10	14 mL Conical Urine Tube	8 x 14 mL	17 x 114
75003808	11	10 mL Blood Collection (16 x 100 mm) or 15 mL Corex/Kimble Tube	28 x 10/15 mL	17 x 121
75003785	12	5/7 mL or 4.5/6 mL Blood Collection Tube (13 x 75-100 mm)	32 x 5/7 mL	13 x 122
75003810	13	5/7 mL Round Bottom Open-Top Tube	36 x 5/7 mL	13 x 118
75003811	14	3/5 mL RIA or Round Bottom Tube (without cap)	48 x 3/5 mL	12 x 124
75003812	15	1.5/2 mL Microtube	48 x 2 mL	11 x 45

more

[1] Rotor, buckets and lids sold separately.
✣ Biocontainment certification by Public Health England, Porton Down, UK.

Thermo Fisher SCIENTIFIC

Rotors and adapters for swinging buckets rotors

HIGHPlate 6000 Swinging Bucket Rotor, 90°, R_{max} 139 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	6300	6168
Sorvall ST4/ST4 Plus	n/a	n/a
Sorvall X1 Pro	n/a	n/a
Sorvall ST1 Plus	n/a	n/a

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Height
Rotor			
75003606	HIGHPlate 6000 Rotor ✿	2 x 5 Standard Microplate or 2 x 1 Filter plates	< 80 mm

Fiberlite H3-LV Swinging Bucket Rotor, 90°, R_{max} 189 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	3600	2738
Sorvall ST4/ST4F Plus	n/a	n/a
Sorvall X1 Pro	n/a	n/a
Sorvall ST1 Plus	n/a	n/a

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Height
Rotor			
75003665	Fiberlite H3-LV Rotor	4 x 7 Standard Microplate or 2 x 4 Deepwell	< 100 mm
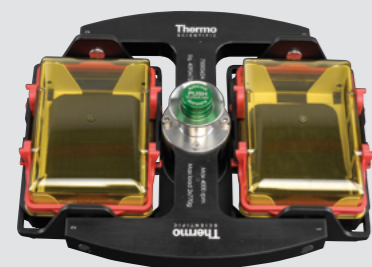
M-20 Swinging Bucket Rotor[1], 90°, R_{max} 127 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	4000	2272
Sorvall ST4/ST4F Plus	4000	2272
Sorvall X1 Pro	4000	2272
Sorvall ST1 Plus	4000	2272

| Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Height
Rotor and Accessories			
75003624	M-20 Microplate Rotor including standard open carriers	2 x 3 Standard Microplate 2 x 1 Deepwell	< 65 mm
75003625	ClickSeal Carriers including Carrier and lids ✿		< 45 mm
75002011	ClickSeal Replacement lids (Set of 2)		
75002012	Replacement M-20 O-rings for lids		

[1] Biocontainment system sold separately.

✿ Biocontainment certification by Public Health England, Porton Down, UK.

Thermo Fisher
SCIENTIFIC

Rotors and adapters for swinging buckets rotors

H-Flex 1 Swinging Bucket Rotor, 90°, R_{max} 170 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X1 Pro	4700	4297
Sorvall ST1 Plus	4700	4297
Sorvall X4/X4F Pro	n/a	n/a
Sorvall ST4/ST4F Plus	n/a	n/a
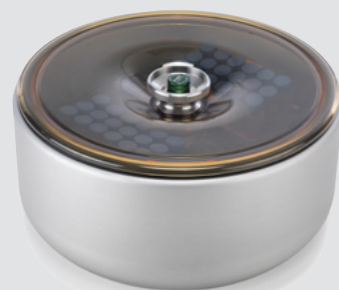
H-Flex HS4 Swinging Bucket Rotor, 90°, R_{max} 170 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X1 Pro	n/a	n/a
Sorvall ST1 Plus	n/a	n/a
Sorvall X4/X4F Pro	6100	7197
Sorvall ST4/ST4F Plus	n/a	n/a

Rotors and Adapters

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003300	1	H-Flex 1 Rotor Cross (Buckets and Lids sold separately)		
75003301	2	H-Flex 1 Rotor Buckets (Set of 2)		
75003302	3	H-Flex 1 Rotor Biocontainment Lids (Set of 2)		
75003309		H-Flex 1 Rotor Biocontainment Lid Replacement O-Rings (Set of 2)		
75003330		H-Flex HS4 Rotor		
75003338		H-Flex HS4 Spare Bucket (Set of 2)		
75003339		H-Flex HS4 Spare Windshield Lid		
Adapters for H-Flex 1 Rotor (Sets of 2)				
73003303	4	50 mL Conical Tube	16 x 50 mL	30 x 126
73003304	5	15 mL Conical Tube	36 x 15 mL	17 x 121
73003305	6	10/12 mL Blood Collection Tube (16x100)	66 x 10/15mL	16 x 133
73003306	7	5/7 mL Blood Collection Tube (13x75-100mm)	84 x 5/7 mL	13 x 10
73003307	8	Microplate Carriers	10 standard, 2 deepwell	n/a
73003308	9	H-Flex 1 Rotor 400m Bottle and Centri-lab Adapter*	n/a	n/a

*A software update requiring a service call by your Thermo Scientific representative may be required. Please contact your local salesperson for more information; 400mL Bottle/Centrilab Adapter maximum speed is 3800 rpm and 2800 x g.

✤ Biocontainment certification by Public Health England, Porton Down, UK.

Thermo Fisher SCIENTIFIC

Fixed angle rotors

Thermo Scientific Rotor Name	Fiberlite F14-6x250 LE	Fiberlite F15-6x100y	Fiberlite F10-6x100 LEX	Fiberlite F13-14x50cy	Fiberlite F15-8x50cy	CLINIConic
Maximum Capacity (mL)	6 x 250 mL	6 x 100 mL	6 x 100 mL	14 x 50 mL	8 x 50 mL	30 x 15 mL
Maximum Speed (rpm[1])	11000 rpm	15000 rpm	10,500 rpm	10000 rpm	14500 rpm	5650 rpm
Maximum RCF (x g[1])	18533 x g	24652 x g	15038 x g	17105 x g	24446 x g	4997 x g
Biocontainment ☀	✓	✓	✓	✓	✓	
Sorvall X4/X4F Pro	✓	✓	✓	✓	✓	
Sorvall ST4/ST4F Plus		✓	✓			
Sorvall X1 Pro		✓	✓	✓	✓	✓
Sorvall ST1 Plus		✓	✓			✓
Maximum Capacity — 250 mL Nalgene Bottle	6	–	–	–	–	–
85 mL Nalgene Oak Ridge Tube	6	6	6	–	–	–
50 mL Nalgene Oak Ridge Tube	6	6	6	14	8	–
50 mL Conical Tube	6	6	6	14	8	–
30 mL Nalgene Oak Ridge Tube	12	6	6	14	8	–
16 mL Nalgene Oak Ridge Tube	30	6	6	14	8	–
15 mL Conical Tube	30	6	6	14	8	30
10 mL Nalgene Oak Ridge Tube	42	12	12	14	8	–
10 mL Blood Collection Tube (16 x 100 mm)	–	–	–	–	–	30
5/7 mL Blood Collection Tube (13 x 75-100 mm)	–	–	–	–	–	30
6.5 mL Round Tube	–	12	12	–	–	–
1.5/2 mL Microtube	–	24	24	–	–	–

[1]Maximum speed based on top performance models.

☀ Biocontainment certification by Public Health England, Porton Down, UK.

Labware not shown to scale.

Thermo Fisher SCIENTIFIC

Fixed angle rotors
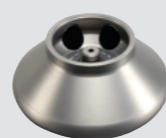
Thermo Scientific Rotor Name	8 x 50 Sealed	HIGHConic II	MicroClick 18 x 5	Fiberlite F21-48x2	Microliter 48 x 2	MicroClick 30 x 2	Microliter 30 x 2
Maximum Capacity (mL)	8 x 50 mL	6 x 100 mL	18 x 5 mL	48 x 2 mL	48 x 2 mL	30 x 2 mL	30 x 2 mL
Maximum Speed (rpm[1])	6700 rpm	10350 rpm	15000 rpm	15200 rpm	15200 rpm	14000 rpm	15200 rpm
Maximum RCF (x g[1])	7177 x g	15090 x g	24652 x g	25055 x g	25314 x g	21693 x g	25830 x g
Biocontainment ☀	✓ (Individual)	✓	✓	✓	✓	✓	✓
Sorvall X4/X4F Pro		✓	✓	✓	✓	✓	✓
Sorvall ST4/ST4F Plus		✓	✓	✓	✓	✓	✓
Sorvall X1 Pro	✓	✓	✓	✓	✓	✓	✓
Sorvall ST1 Plus	✓	✓	✓	✓	✓	✓	✓
Maximum Capacity — 250 mL Nalgene Bottle	–	–	–	–	–	–	–
85 mL Nalgene Oak Ridge Tube	–	6	–	–	–	–	–
50 mL Nalgene Oak Ridge Tube	–	6	–	–	–	–	–
50 mL Conical Tube	8	6	–	–	–	–	–
30 mL Nalgene Oak Ridge Tube	–	6	–	–	–	–	–
16 mL Nalgene Oak Ridge Tube	–	6	–	–	–	–	–
15 mL Conical Tube	8	6	–	–	–	–	–
10 mL Nalgene Oak Ridge Tube	–	12	–	–	–	–	–
10 mL Blood Collection Tube (16 x 100 mm)	8	–	–	–	–	–	–
5/7 mL Blood Collection Tube (13 x 75-100 mm)	8	–	–	–	–	–	–
6.5 mL Round Tube	–	12	18	–	–	–	–
1.5/2 mL Microtube	–	24	18	48	48	30 (Including spin columns)	30

[1]Maximum speed based on top performance models.

☀ Biocontainment certification by Public Health England, Porton Down, UK.

Labware not shown to scale.

Thermo Fisher
SCIENTIFIC

Rotors and adapters for fixed angle rotors

Fiberlite F14-6x250 LE Fixed Angle Rotor, 23°, R_{max} 137 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro 230V	11000	18533
Sorvall X4/X4F Pro 120V	10000	15317
Sorvall ST4/ST4F Plus	n/a	n/a
Sorvall X1 Pro	n/a	n/a

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003662	Fiberlite F14-6 x 250LE Rotor for 250 mL Nalgene Bottles ✷	6 x 250 mL	62 x 125
021-062153	Replacement O-Ring Kit		
3141-0250	250 mL Nalgene Polypropylene Bottle (Set of 36)		
3140-0251	250 mL Nalgene Polycarbonate Bottle (Set of 36)		
Adapters for F14-6 X 250LE Rotor (Sets of 2, unless stated otherwise)			
010-1119	85 mL Nalgene Oak Ridge Tube	6 x 85 mL	38 x 109
010-0138	50 mL Nalgene Oak Ridge Tube	6 x 50 mL	29.5 x 121
75100136	50 mL Conical Tube	6 x 50 mL	30 x 121
010-1072	30 mL Nalgene Oak Ridge Tube / 38 mL Round Tube	12 x 30 mL	26 x 105
010-1074	16 mL Nalgene Oak Ridge Tube	30 x 16 mL	18 x 107
010-1410	15 mL Conical Tube	30 x 15 mL	17 x 121
00389	10 mL Nalgene Oak Ridge Tube / 12 mL Round Tube (each)	42 x 10 mL	17 x 110

more

✷ Biocontainment certification by Public Health England, Porton Down, UK.

Rotors and adapters for fixed angle rotors

Fiberlite F15-6x100y Fixed Angle Rotor, 25°, R_{max} 98 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	15000	24652
Sorvall ST4/ST4F Plus	13000	18516
Sorvall X1 Pro	15000	24652
Sorvall ST1 Plus	13000	18516

Fiberlite F10-6x100 LEX Fixed Angle Rotor, 45°, R_{max} 122 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	10500	15038
Sorvall ST4/ST4F Plus	10500	15038
Sorvall X1 Pro	10500	15038
Sorvall ST1 Plus	10500	15038

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003698	Fiberlite F15-6 x 100y Rotor for 100 mL/85 mL Nalgene ✿	6 x 100 mL	38 x 106
021-069031	Replacement O-Ring Kit		
75003340	Fiberlite F10-6 x 1000 LEX Rotor for 100 mL/85mL Nalgene ✿	6 x 100 mL	38 x 106
021-06935	Replacement O-Ring Kit		
3118-0085	85 mL Nalgene Oak Ridge Tube (Set of 50)	6 x 85 mL	38 x 106
Adapters for F15-6 x 100y Rotor (Each, unless stated otherwise)			
75003102	50 mL Nalgene Oak Ridge Tube	6 x 50 mL	29.5 x 117
75003103	50 mL Conical Tube	6 x 50 mL	30 x 121
75003094	30 mL Nalgene™ Oak Ridge Tube / 38 mL Round Tube	6 x 30 mL	26 x 110
76002906	16 mL Nalgene Oak Ridge Tube	6 x 16 mL	18 x 123
75003095	15 mL Conical Tube	6 x 15 mL	17 x 123
75003093	10 mL Nalgene Oak Ridge Tube / 12 mL Round Tube	12 x 12 mL	17 x 95
75003092	6.5 mL Round Bottom Tube	12 x 6.5 mL	13 x 114
75003091	1.5/2 mL Microtube	24 x 2 mL	11 x 40

✿ Biocontainment certification by Public Health England, Porton Down, UK.

Thermo Fisher
S C I E N T I F I C

Rotors and adapters for fixed angle rotors

Fiberlite F13-14x50cy Fixed Angle Rotor, 34°, R_{max} 153 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro 230V	10000	17105
Sorvall X4/X4F Pro 120V	9250	14636
Sorvall ST4/ST4F Plus	n/a	n/a
Sorvall X1 Pro	8,500	12,359
Sorvall ST1 Plus	n/a	n/a

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003661	Fiberlite F13-14x50cy for 50 mL Conical Tubes ✿	14 x 50 mL	30 x 121
021-149027	Replacement O-Ring Kit		
Adapters for F13-14x50cy Rotor (Set of 2, unless otherwise stated)			
010-0377	50 mL Nalgene Oak Ridge Tube	14 x 50 mL	29.5 x 108
010-1147	30 mL Nalgene Oak Ridge Tube	14 x 30 mL	26 x 102
010-0376	16 mL Nalgene Oak Ridge Tube	14 x 16 mL	18 x 123
75100378	15 mL Conical Tube (for Corning tubes)	14 x 15 mL	17 x 121
010-1340	15 mL Nunc Conical Tube and Filtration Devices	14 x 15 mL	17 x 121
010-1311	10 mL Nalgene Oak Ridge Tube / 12 mL Round Tube	28 x 12 mL	17 x 95

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Fiberlite F15-8x50cy Fixed Angle Rotor, 25°, R_{max} 104 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	14500	24446
Sorvall ST4/ST4F Plus	n/a	n/a
Sorvall X1 Pro 230V	14500	24446
Sorvall X1 Pro 120V	14000	22789
Sorvall ST1 Plus	n/a	n/a

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003663	Fiberlite F15-8 x 50cy for 50 mL Conical Tubes ✿	8 x 50 mL	30 x 121
021-149027	Replacement O-Ring Kit		
Adapters for F15-8x50cy Rotor (Set of 2, unless otherwise stated)			
010-0377	50 mL Nalgene Oak Ridge Tube	8 x 50 mL	29 x 108
010-1147	30 mL Nalgene Oak Ridge Tube	8 x 30 mL	26 x 102
010-0376	16 mL Nalgene Oak Ridge Tube	8 x 16 mL	18 x 123
75100378	15 mL Conical Tube (for Corning tubes)	8 x 15 mL	17 x 121
010-1340	15 mL Nunc Conical Tube and Filtration Devices	8 x 15 mL	17 x 121
010-1311	10 mL Nalgene Oak Ridge Tube / 12 mL Round Tube	8 x 12 mL	17 x 95

✿ Biocontainment certification by Public Health England, Porton Down, UK.

Thermo Fisher SCIENTIFIC

Rotors and adapters for fixed angle rotors

CLINIConic Fixed Angle Rotor, 37°, R_{max} 140 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	n/a	n/a
Sorvall ST4/ST4F Plus	n/a	n/a
Sorvall X1 Pro	5650	4997
Sorvall ST1 Plus	5650	4997

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003623	CLINIConic Fixed Angle Rotor for 15 mL Round and Conical Tubes	30 x 15 mL	17 x 121
Adapters for CLINIConic Rotor (Each)			
75003702	10 mL Round Bottom Tube	30 x 10 mL	17 x 131
11172596	7 mL Blood Collection Tubes (13 x 100 mm)	30 x 7 mL	17 x 131
11172595	5 mL Blood Collection Tubes (13 x 75 mm)	30 x 5 mL	13 x 95

more

8 x 50 Individually Sealed Fixed Angle Rotor, 45°, R_{max} 143 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	n/a	n/a
Sorvall ST4/ST4F Plus	n/a	n/a
Sorvall X1 Pro 230V	6700	7177
Sorvall X1 Pro 120V	6500	6755
Sorvall ST1 Plus 230V	6700	7177
Sorvall ST1 Plus 120V	6500	6755

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003694	8 x 50 Individually Sealed for 50 mL Conical Tubes ❋	8 x 50 mL	30 x 121
75003689	Replacement O-Ring Kit		
Adapters for 8 x 50 Sealed Rotor (Set of 6)			
75005755	15 mL Conical Tube	8 x 50 mL	17 x 121
75005747	10 mL Blood Collection Tube (16 x 100 mm)	8 x 10 mL	16 x 110
75005805	7 mL Blood Collection Tube (13 x 100 mm) (set of 2)	8 x 7 mL	13 x 110
75005749	3.5 mL Blood Collection Tube	16 x 3.5 mL	11 x 75

❋Biocontainment certification by Public Health England, Porton Down, UK.

Rotors and adapters for fixed angle rotors

HIGHConic II Aluminium Fixed Angle Rotor, 45°, R_{max} 126 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	10350	15090
Sorvall ST4/ST4F Plus	10350	15090
Sorvall X1 Pro	10350	15090
Sorvall ST1 Plus	10350	15090

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003620	HIGHConic Fixed Angle Rotor for 100 mL/85 mL Nalgene Oak Ridge Tube ✤	6 x 100 mL	38 x 123
75003058	Replacement O-Ring Kit		
3118-0085	85 mL Nalgene Oak Ridge Tube (Set of 50)	6 x 85 mL	38 x 106
Adapters for HIGHConic Rotor (Each, unless stated)			
75003102	50 mL Nalgene Oak Ridge Tube	6 x 50 mL	30 x 117
75003103	50 mL Conical Tube	6 x 50 mL	30 x 121
75003094	30 mL Nalgene Oak Ridge Tube / 38 mL Round Tube	6 x 30 mL	26 x 110
76002906	16 mL Nalgene Oak Ridge Tube	6 x 16 mL	18 x 123
75003095	15 mL Conical Tube	6 x 15 mL	17 x 123
75003093	10 mL Nalgene Oak Ridge Tube / 12 mL Round Tube	12 x 12 mL	17 x 95
75003092	6.5 mL Round Bottom Tube	12 x 6.5 mL	13 x 114
75003091	1.5/2 mL Microtube	24 x 2 mL	11 x 40

MicroClick 18x5 Aluminum Fixed Angle Rotor, 45°, R_{max} 102 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	15000	24652
Sorvall ST4/ST4F Plus	15000	24652
Sorvall X1 Pro	15000	24652
Sorvall ST1 Plus	15000	24652

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75005765	18 x 5 MicroClick Rotor for 5mL Conical and Flip Top Tubes ✤	18 x 5 mL	17 x 6
20059119	ClickSeal	n/a	n/a
75005726	O-Ring Set	n/a	n/a
75003500	O-Ring Grease	n/a	n/a
Adapters for MicroClick Rotor			
75005756	1.5/2 mL Microtube	18 x 5	11 x 45

✤ Biocontainment certification by Public Health England, Porton Down, UK.

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Rotors and adapters for fixed angle rotors

Fiberlite F21-48x2 Fixed Angle Rotor, 45°, R_{max} 97 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	15200	25055
Sorvall ST4/ST4F Plus	15200	25055
Sorvall X1 Pro	15200	25055
Sorvall ST1 Plus	15200	25055

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003664	Fiberlite F21-48 x 2 for 1.5/2 mL Microtubes ❋	48 x 2 mL	11 x 50
021-489021	Replacement O-Ring Kit		

more

Microliter 48 x 2 Aluminium Fixed Angle Rotor, 45°, R_{max} 98 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	15200	25314
Sorvall ST4/ST4F Plus	15200	25314
Sorvall X1 Pro	15200	25314
Sorvall ST1 Plus	15200	25314

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003602	48 x 2 Aluminum for 1.5/2 mL Microtubes ❋	48 x 2 mL	11 x 50
75003349	Replacement O-Ring Kit		

❋ Biocontainment certification by Public Health England, Porton Down, UK.

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Rotors and adapters for fixed angle rotors

MicroClick 30 x 2 Aluminum Fixed Angle Rotor, 45°, R_{max} 99 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	14000	21693
Sorvall ST4/ST4F Plus	14000	21693
Sorvall X1 Pro	14000	21693
Sorvall ST1 Plus	14000	21693

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75005719	30 x 2 MicroClick for 1.5/2 mL Microtubes and Spin Columns ✤	30 x 2 mL	11 x 50
75005726	Replacement O-Ring Kit		

Microliter 30 x 2 Aluminum Fixed Angle Rotor, 45°, R_{max} 100 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4/X4F Pro	15200	25830
Sorvall ST4/ST4F Plus	15200	25830
Sorvall X1 Pro	15200	25830
Sorvall ST1 Plus	15200	25830

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003652	30 x 2 Aluminum for 1.5/2 mL Microtubes ✤	30 x 2 mL	11 x 50
75003349	Replacement O-Ring Kit		
Adapters for all Microliter Rotors (Set of 30)			
75005753	0.5 mL Microtube		8 x 44
75005754	0.25 mL Microtube		6 x 46
75005752	0.2 mL PCR Tube		5 x 20

✤ Biocontainment certification by Public Health England, Porton Down, UK.

Meet our family of centrifuges

Click on the sizing tool below to explore the best options for your lab space and applications

General Purpose
1.6 L Ventilated ⟩

General Purpose
1.6 L Refrigerated ⟩

General Purpose
4 L Floor Model
Ventilated &
Refrigerated ⟩

General Purpose
4 L Ventilated ⟩

General Purpose
4 L Refrigerated ⟩

View All ⟩

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General Purpose Pro and Plus Centrifuge Series specifications
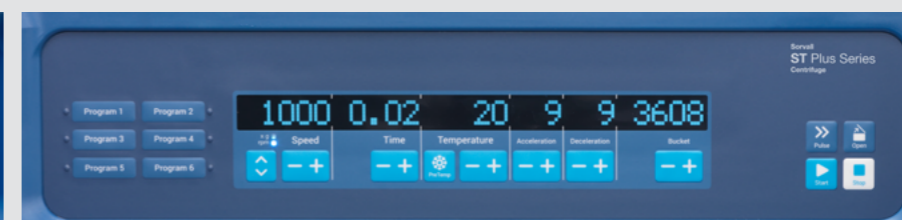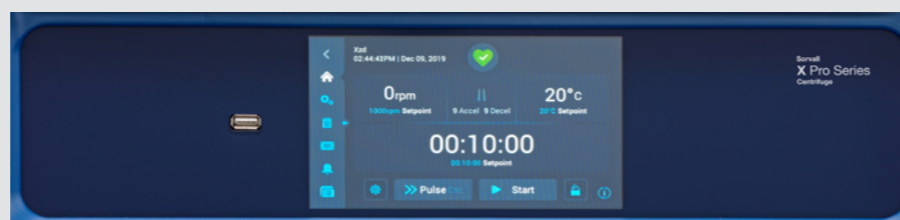
	General Purpose Pro Centrifuge	**General Purpose Plus Centrifuge**
Screen	Full color Touchscreen	LCD Display
Amount of programs	100 Programs with the ability to do step programming	6 Programs
Speed	Increments in 1 RPM	Increments in 100 RPM
G-Force	Increments in 1 x g	Increments in 100 x g
Time Setting	In HH x MM x SS format, continuous and ACE modes	In HH x MM format as well as continuous mode
Time Control	At start of the centrifugation run and at speed	At start of the centrifugation run
Pulse button	Pulse duration is customizable	Pulse duration is fixed
Number of rotors	16 optional rotors for 1.6 L versions and 17 optional rotors for 4 L versions	12 optional rotors for 1.6 L versions and 11 optional rotors for 4 L versions
Buckets selection	Selection based on bucket shape and complete product number	Selection based on 4 last digits of the product number
Error message	Error Code with User directions	Error Code
Data logging	Data is stored and can be accessed through the Health Status Button	External logging in lab journals
Data extraction	USB Port	RS232 port
Centrifuge access	2 modes of centrifuge access: open and secure	Open mode of access

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4 L Benchtop Centrifuges: specifications and ordering information

Specifications	Sorvall X4 Pro		Sorvall X4R Pro		Sorvall ST4 Plus		Sorvall ST4R Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
Swinging Buckets Rotors								
Maxiumum Capacity	4 x 1000 mL with TX-1000 rotor							
Maximum Speed	6000 rpm with BIOShield 1000A rotor				5300 rpm with BIOShield 1000A rotor			
Maximum RCF	7164 x g with BIOShield 1000A rotor				5590 x g with BIOShield 1000A rotor			
Fixed Angle Rotors								
Maxiumum Capacity	6 x 250 mL with F14-6x250LE rotor				6 x 100 mL with F15-6x100 or F10-6x100 rotor			
Maximum Speed	15200 rpm with F21-48x2, Microliter 48x2 or Microliter 30x2							
Maximum RCF	25830 x g with Microliter 30x2							
Centrifuge Details								
Control System	Microprocessor							
Drive System	Direct, Brushless induction low profile motor							
Accel/Decel Profiles	Choices of 9 Accel / 10 Decel Rates							
Material	front, top, sides: PC-ABS plastic painted with 2K PUR-based lacquer; metal housing: cold rolled steel with powder paint; centrifuge bowl: stainless steel; centrifuge feet: rubber							
Safety Features	SMARTSpin Imbalance detection, finger-pinch prevention, crash-proof construction							
Warranty	5 Year Limited (2 years standard warranty + 3 additional years on motor and refrigeration)							
Includes	printed English user manual, USB stick with 28 languages of user manual, corrosion resistance oil (70009824), power cord, declaration of conformity							
Temperature Range	N/A		-10°C to +40°C		N/A		-10°C to +40°C	
Number of Compatible Rotors	17		17		12		12	
Display Details								
Display	Full color touch screen interface				Push button and high contrast LCD interface			
Run Time	max 99h, 59min, 59sec; also with continuous and customizable pulse				max 9h, 59min; also with continuous and pulse modes			
Timer	count up or down				count down only			
Program Storage	up to 100 run programs				up to 6 run programs			
Programmability	via easy access touch screen menu				via 6 direct access buttons			
Dimensions, Weight								
Width (inches) Exterior	22.3		29.4		22.3		29.4	
Width (cm) Exterior	56.6		74.6		56.6		74.6	
Depth (inches) Exterior	27.2		27.2		27.2		27.2	
Depth (cm) Exterior	69.0		69.0		69.0		69.0	
Height (inches) Exterior	14.3		14.2		14.3		14.2	
Height (cm) Exterior	36.2		36.1		36.2		36.1	
Height (inches) Open Cover	33.9		33.9		33.9		33.9	
Height (cm) Open Cover	86.1		86.0		86.1		86.0	
Footprint Dimensions (inches)	22.3 x 23.1		29.4 x 23.0		22.3 x 23.1		29.4 x 23.0	
Footprint Dimensions (cm)	56.6 x 58.8		74.6 x 58.4		56.6 x 58.8		74.6 x 58.4	
Net Weight (lbs)	196		265		196		265	
Net Weight (kgs)	89		120		89		120	
Certifications and Standards								
IVD/MD	X		X		X		X	
Certifications	EN/UL/IEC 61010-1, EN/UL/IEC 61010-2-020 and 61010-2-101, EN/UL/IEC 61326-1, EN/UL/IEC 61326-2-6, FCC part 15							
Standards	ISO 14971, ISO 13485, ISO 9001							
Ordering Information	Sorvall X4 Pro		Sorvall X4R Pro		Sorvall ST4 Plus		Sorvall ST4R Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
230V§	75009505*	75009905	75009520* / 75009620*§	75009920 / 75009820§	75009509*	75009909	75009524* / 75009624*§	75009924 / 75009824§
120V	75009506*	N/A	75009521*	N/A	75009510*	N/A	75009525*	N/A
100V	75009507*	75009907	75009522*	75009922	75009511*	75009911	75009526*	75009926

*Indicates a centrifuge, rotor and/
or adapter product approved for
use in clinical applications; see
user manual for details.

§ 220V / 60 Hz [Korea, etc.]

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4 L Floor Model Centrifuges: specifications and ordering information

Specifications	Sorvall X4F Pro		Sorvall X4RF Pro		Sorvall ST4F Plus		Sorvall ST4RF Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
Swinging Buckets Rotors								
Maxiumum Capacity	4 x 1000 mL with TX-1000 rotor							
Maximum Speed	6000 rpm with BIOShield 1000A rotor				5300 rpm with BIOShield 1000A rotor			
Maximum RCF	7164 x g with BIOShield 1000A rotor				5590 x g with BIOShield 1000A rotor			
Fixed Angle Rotors								
Maxiumum Capacity	6 x 250 mL with F14-6x250LE rotor				6 x 100 mL with F15-6x100 or F10-6x100 rotor			
Maximum Speed	15200 rpm with F21-48x2, Microliter 48x2 or Microliter 30x2							
Maximum RCF	25830 x g with Microliter 30x2							
Centrifuge Details								
Control System	Microprocessor							
Drive System	Direct, Brushless induction low profile motor							
Accel/Decel Profiles	Choices of 9 Accel / 10 Decel Rates							
Material	front, top, sides: PC-ABS plastic painted with 2K PUR-based lacquer; metal housing: cold rolled steel with powder paint; centrifuge bowl: stainless steel; centrifuge feet: rubber							
Safety Features	SMARTSpin Imbalance detection, finger-pinch prevention, crash-proof construction							
Warranty	5 Year Limited (2 years standard warranty + 3 additional years on motor and refrigeration)							
Includes	printed English user manual, USB stick with 28 languages of user manual, corrosion resistance oil (70009824), power cord, declaration of conformity							
Temperature Range	N/A		-10°C to +40°C		N/A		-10°C to +40°C	
Number of Compatible Rotors	17		17		12		12	
Display Details								
Display	Full color touch screen interface				Push button and high contrast LCD interface			
Run Time	max 99h, 59min, 59sec; also with continuous and customizable pulse				max 9h, 59min; also with continuous and pulse modes			
Timer	count up or down				count down only			
Program Storage	up to 100 run programs				up to 6 run programs			
Programmability	via easy access touch screen menu				via 6 direct access buttons			
Dimensions, Weight								
Width (inches) Exterior	22.3		22.3		22.3		22.3	
Width (cm) Exterior	56.6		56.6		56.6		56.6	
Depth (inches) Exterior	27.2		27.2		27.2		27.2	
Depth (cm) Exterior	69.0		69.0		69.0		69.0	
Height (inches) Exterior	32.8		32.8		32.8		32.8	
Height (cm) Exterior	83.5		83.5		83.5		83.5	
Height (inches) Open Cover	54.1		54.1		54.1		54.1	
Height (cm) Open Cover	135		135		135		135	
Footprint Dimensions (inches)	22.3 x 23.1		22.3 x 23.0		22.3 x 23.1		22.3 x 23.0	
Footprint Dimensions (cm)	56.6 x 58.8		56.6 x 58.4		56.6 x 58.8		56.6 x 58.4	
Net Weight (lbs)	335		319		335		319	
Net Weight (kgs)	152		145		152		145	
Certifications and Standards								
IVD/MD	X		X		X		X	
Certifications	EN/UL/IEC 61010-1, EN/UL/IEC 61010-2-020 and 61010-2-101, EN/UL/IEC 61326-1, EN/UL/IEC 61326-2-6, FCC part 15							
Standards	ISO 14971, ISO 13485, ISO 9001							

Ordering Information	Sorvall X4F Pro		Sorvall X4RF Pro		Sorvall ST4F Plus		Sorvall ST4RF Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
230V§	75009532*	75009932	75009541* / 75009026*§	75009941 / 75009027§	75009982*	75009956	75009985* / 75009024*§	75009959 / 75009025§
120V	75009533*	N/A	75009539*	N/A	75009981*	N/A	75009984*	N/A
100V	75009534*	75009934	75009540*	75009940	75009980*	75009954	75009983*	75009957

*Indicates a centrifuge, rotor and/or adapter product approved for use in clinical applications; see user manual for details.

§ 220V / 60 Hz [Korea, etc.]

1.6 L Benchtop Centrifuges: specifications and ordering information

Specifications	Sorvall X1 Pro		Sorvall X1R Pro		Sorvall ST1 Plus		Sorvall ST1R Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
Swinging Buckets Rotors								
Maximum Capacity	4 x 400 mL with TX-400 rotor							
Maximum Speed	6300 rpm with BIOShield 720 rotor				5300 rpm with BIOShield 720 rotor			
Maximum RCF	7188 x g with BIOShield 720 rotor				5088 x g with BIOShield 720 rotor			
Fixed Angle Rotors								
Maximum Capacity	6x100 mL with F15 6x100y				6x100 mL with F15 6x100y			
Maximum Speed	15200 rpm with F21-48x2, Microliter 48x2 or Microliter 30x2							
Maximum RCF	25830 x g with Microliter 30x2							
Centrifuge Details								
Control System	Microprocessor							
Drive System	Direct, Brushless induction low profile motor							
Accel/Decel Profiles	Choices of 9 Accel / 10 Decel Rates							
Material	front, top, sides: PC-ABS plastic painted with 2K PUR-based lacquer; metal housing: cold rolled steel with powder paint; centrifuge bowl: stainless steel; centrifuge feet: rubber							
Safety Features	SMARTSpin Imbalance detection, finger-pinch prevention, crash-proof construction							
Warranty	5 Year Limited (2 years standard warranty + 3 additional years on motor and refrigeration)							
Includes	printed English user manual, USB stick with 28 languages of user manual, corrosion resistance oil (70009824), power cord, declaration of conformity							
Temperature Range	N/A		-10°C to +40°C		N/A		-10°C to +40°C	
Number of Compatible Rotors	16		16		14		14	
Display Details								
Display	Full color touch screen interface				Push button and high contrast LCD interface			
Run Time	max 99h, 59min, 59sec; also with continuous and customizable pulse				max 9h, 59min; also with continuous and pulse modes			
Timer	count up or down				count down only			
Program Storage	up to 100 run programs				up to 6 run programs			
Programmability	via easy access touch screen menu				via 6 direct access buttons			
Dimensions, Weight								
Width (inches) Exterior	17.5		24.6		17.5		24.6	
Width (cm) Exterior	44.5		62.5		44.5		62.5	
Depth (inches) Exterior	26		26		26		26	
Depth (cm) Exterior	66		66		66		66	
Height (inches) Exterior	14.3		14.2		14.3		14.2	
Height (cm) Exterior	36.2		36.1		36.2		36.1	
Height (inches) Open Cover	33.6		33.6		33.6		33.6	
Height (cm) Open Cover	85.5		85.5		85.5		85.5	
Footprint Dimensions (inches)	17.5 x 23.1		24.6 x 23.0		17.5 x 23.1		24.6 x 23.0	
Footprint Dimensions (cm)	44.5 x 58.8		62.5 x 58.4		44.5 x 58.8		62.5 x 58.4	
Net Weight (lbs)	134		207		134		207	
Net Weight (kgs)	61		94		61		94	
Certifications and Standards								
IVD/MD	X		X		X		X	
Certifications	EN/UL/IEC 61010-1, EN/UL/IEC 61010-2-020 and 61010-2-101, EN/UL/IEC 61326-1, EN/UL/IEC 61326-2-6, FCC part 15							
Standards	ISO 14971, ISO 13485, ISO 9001							

Ordering Information	Sorvall X1 Pro		Sorvall X1R Pro		Sorvall ST1 Plus		Sorvall ST1R Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
230V§	75009220*	75009720	75009260*	75009760	75009240*	75009740	75009380*	75009880
120V	75009220*	N/A	75009261*	N/A	75009240*	N/A	75009381*	N/A
100V	75009220*	75009720	75009263*	75009763	75009240*	75009740	75009383*	75009883

*Indicates a centrifuge, rotor and/ or adapter product approved for use in clinical applications; see user manual for details.

§ 220V / 60 Hz [Korea, etc.]

This product is intended for General Laboratory Use. It is the customer's responsibility to ensure that the performance of the product is suitable for customers' specific use or application.

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